

U.S. Patent App. No. 09/896,776
Docket No. 1140668-0025
Page 3 of 16

Listing of the Pending Claims

The following lists the presently pending claims.

1-15 (previously cancelled)

16. (previously presented) An industrial controller comprising a plurality of devices, for use in controlling a system including a plurality of components, the controller comprising:

a) control means independent of the controlled components;

b) component control means relating to the controlled components for supplementing the control means, the component control means implemented using a plurality of technology objects corresponding to the components, the technology objects distributable on the devices.

17. (previously presented) An industrial controller according to claim 16, further comprising automatically generated communication links between at least two of the technology objects.

18. (currently amended) An industrial controller according to claim 16, wherein technology objects comprise attributes taken into account in the generation of the communications links.

19. (previously presented) An industrial controller according to claim 16, wherein technology objects are distributable on a plurality of devices within a project, the project relating to plurality of control units.

20. (previously presented) An industrial controller according to claim 16, wherein the functionality of the technology objects is distributed among control units in equidistant communication with one another in real time with clock synchronization.

U.S. Patent App. No. 09/896,776
Docket No. 1140668-0025
Page 4 of 16

21. (previously presented) An industrial controller according to claim 16, wherein the technology object types permit technological scaling of the functionality of the controller.

22. (previously presented) An industrial controller according to claim 16, wherein technology objects are interleaved to form container objects.

23. (previously presented) An industrial controller according to claim 16, further adapted to provide a plurality of views of the technology objects to a user.

24. (previously presented) An industrial controller according to claim 16, further adapted for feedback-free programming of a technology object with respect to the other technology objects and the control means.

25. (previously presented) An industrial controller according to claim 16, wherein technology objects are represented in the engineering system by graphical elements.

26. (previously presented) An industrial controller according to claim 16, wherein the technology objects have types and the technology object types are clustered into one or more technology packages.

27. (previously presented) A method of programming an industrial control system comprising a plurality of devices, the controller being programmed for one or more projects and comprising a plurality of technology objects, the method comprising the steps of:

- a) providing a technology-neutral control system;
- b) interleaving of the technology objects to form a set of complex technology objects;
- c) distributing a plurality of the technology objects on a plurality of the devices; and
- d) reusing at least one of the complex technology objects in a second project.

U.S. Patent App. No. 09/896,776
Docket No. 1140668-0025
Page 5 of 16

28. (currently amended) A method according to claim 27, further comprising communications channels between at least two of the technology objects, wherein attributes of the technology objects are taken into account in generating the communication channels.

29. (previously presented) A method of programming an industrial control system comprising a plurality of devices, the controller being programmed for one or more projects and comprising a plurality of technology objects, the method comprising the steps of:

- a) providing a technology-neutral control system;
- b) instantiating the technology objects;
- c) interleaving the technology objects to form a set of complex technology objects for a first project;
- d) distributing the technology objects on a plurality of the devices;
- e) generating communication channels between the technology objects; and
- f) reusing at least one of the complex technology objects in a second project.

30. (previously presented) A method for programming an industrial controller for a technical process, the method comprising the steps of:

- a) selecting a plurality of technology objects relevant to a desired application;
- b) interleaving the selected technology objects to form technology objects having complex functionality; and
- c) distributing the interleaved technology objects onto a device.

31. (previously presented) The method of claim 30, wherein interleaved technology objects may be re-used in a subsequent application of the method.

U.S. Patent App. No. 09/896,776
Docket No. 1140668-0025
Page 6 of 16

32. (previously presented) A system for programming an industrial controller,
comprising:

- a) an industrial control system;
- b) means for selecting a plurality of technology objects relevant to a desired application;
- c) means for interleaving the selected technology objects to form technology objects having complex functionality; and
- d) means for distributing the interleaved technology objects onto a plurality of devices.